

$$\text{Power} = 1/2 A \rho v^3$$

What are the advantages and disadvantages of the various energy sources?

Q10

albedo = scattered/incident

$a = (\text{scattered from atmosphere} + \text{scattered from surface}) / \text{incident}$

$$a = (0.2 + 0.05)S/S$$

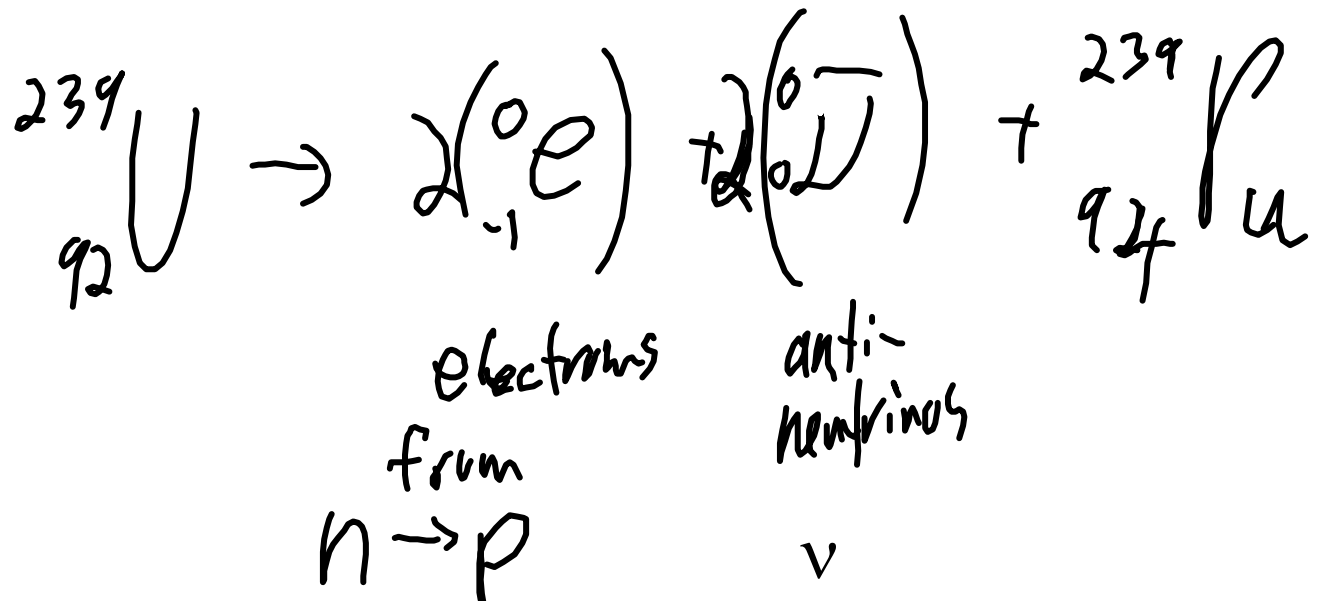
$$a = 0.25$$

total power absorbed = (1-albedo)xtotal power input

Q11

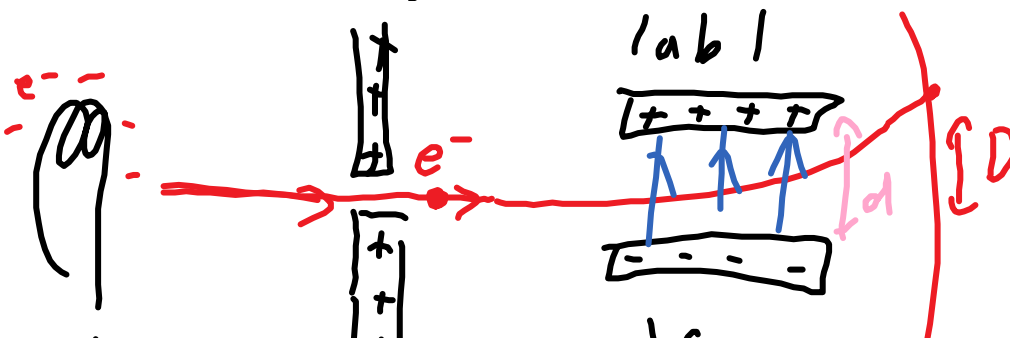
moderator - slows the neutrons so they can react more often with the fissionable material - old reactors like Chernobyl had graphite as a moderator, most modern reactors use heavy water

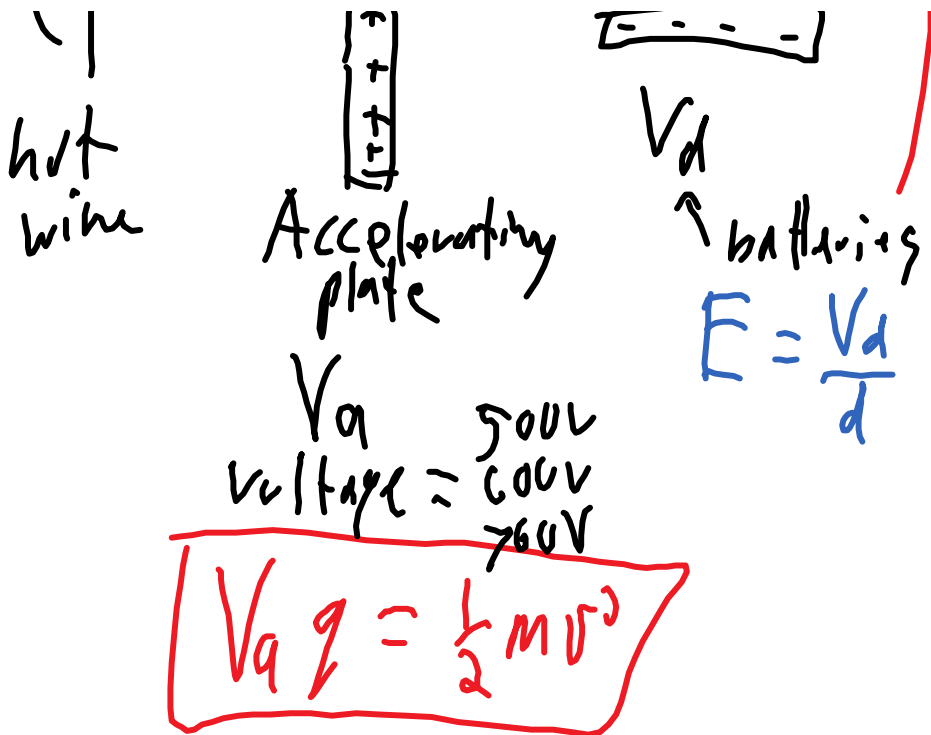
control rods - absorb the neutrons to slow or stop the reaction. Cadmium.
 fuel rods - have fissionable material in pellets at sub-critical densities
 heat exchanger - water that takes the heat from the nuclear reaction, and either changes into steam to run the turbines or heats another set of water for turbines. - may have heavy water



Lab next class

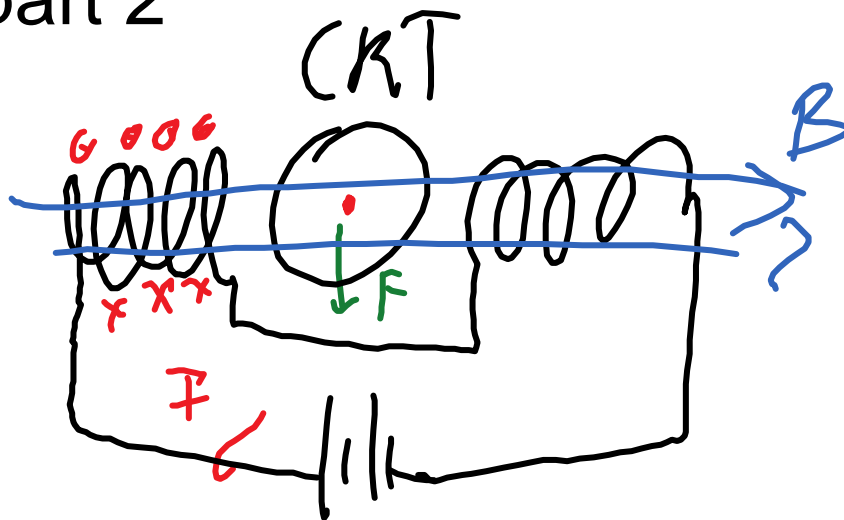
Cathode Ray Tube, CRT



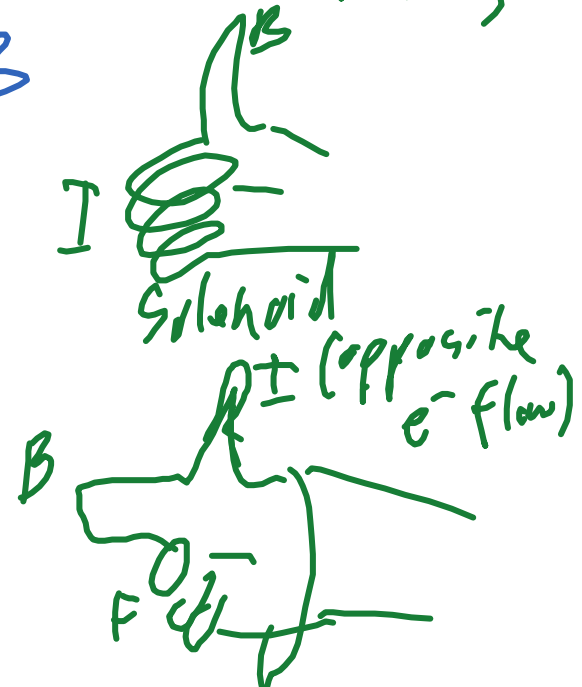


vary V_d and observe D
vary V_a with max V_d and observe D

part 2



Two Right hand rules



D vs I

D vs V_a if I_{max}

Bring labbook
finish the handout Q13-16
start old exams (earplugs?)and
[http://physics-
pages.wikispaces.com/IB%
20Resources](http://physics-pages.wikispaces.com/IB%20Resources)
try the specimen papers

read curriculum (start p25)
[http://physics-
pages.wikispaces.com/file/view/phys
ics%20guide%
202016.pdf/523013436/physics%
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